

Figure 1

1 MGAARGSPAR PRRLPLLSVL LLPLLGGTQT AIVFIKQPSS QDALQGRRAL LRCEVEAPGP  
 61 VHVVWLLDGA PVQDTERRFA QGSSLSFAAV DRLQDSGTFQ CVARDDVTGE EARSANASFN  
 121 IKWIEAGPVV LKHPASEAEI QPQTQVTLRC HIDGHPRTY QWFRDGTPLS DGQSNHTVSS  
 181 KERNLTLRPA GPEHSGLYSC CAHSAFGQAC SSQNFTLSIA DESFARVULA PQDVVVARYE  
 241 EAMFHCQFSA QPPPSLQWLF EDETPITNRS RPPHLRRATV FANGSLLLTQ VRPRNAGIYR  
 301 CIGQQQRGPP IILEATLHLA EIEDMPLFEP RVFTAGSEER VTCLPPKGLP EPSVWWEHAG  
 361 VRLPTHGRVY QKGHELVLAN IAESDAGVYT CHAANLAGQR RQDVNITVAT VPSWLKKPQD  
 421 SQLEEGKPGY LDCLTQATPK PTVVWYRNQM LISEDSRFEV FKNGTLRINS VEVDGTWYR  
 481 CMSSTPAGSI EAQARVQVLE KLKFTPPPQP QQCMEFDKEA TVPCSATGRE KPTIKWERAD  
 541 GSSLPEWVTD NAGTLHFARV TRDDAGNYTC IASNGPQQI RAHVQLTVAV FITFKVEPER  
 601 TTVYQGHTAL LQCEAQGDPK PLIQWKGKDR ILDP TKLGPR MHIFQNGSLV IHDVAPEDSG  
 661 RYTCIAGNSC NIKHTEAPLY VVDKVPPEES EGPGSPPPYK MIQTIGLSVG AAVAYIIAVL  
 721 GLMFYCKKRC KAKRLQKQPE GEEPEMECLN GGPLQNGQPS AEIQEEVALT SLGSGPAATN  
 781 KRHSTSDKMH FPRSSLQPIT TLGKSEFGEV FLAKAQGLEE GVAETLVLVK SLQTKDEQQQ  
 841 LDFRRELEMP GKLNHANVVR LLGLCREAEP HYMVLEYVDL GDLKQFLRIS KSKDEKLKSQ  
 901 PLSTKQKVAL CTQVALGMEH LSNNRFVHKD LAARNCLVSA QRQVKVSALG LSKDVYNSEY  
 961 YHFRQAWVPL RWMSPEAILE GDFSTKSDVW AFGVLMWEVF THGEMPHGGQ ADDEV LADLQ  
 1021 AGKARLPQPE GCPSKLYRLM QRCWALSPKD RPSFSEIASA LGDSTVDSKP

Figure 2

```

1  cgccctcgga cgccctcgga tcgggctccg gctgcggtcg ctgctgctgc gcccgcgctc
61  cgggtgcgctc cgccctcctgt gcccgcgcgc gagcgcgagtc tgcgcgcccc ccgtgcgcgc
121  tcagctcctt ttcttgagcc cgccgcgatg ggagctgcgc ggggatcccc ggccagaccc
181  cgccggttgct ctctgctcag cgctctgctg ctgccgctgc tgggcggtac ccagacagcc
241  attgtcttca tcaagcagcc gtctctccag gatgcactgc aggggcgcgc ggcgctgctt
301  cgctgtgagg ttgaggctcc gggcccggta catgtgtact ggctgctcga tggggccctt
361  gtccaggaca cggagcggcg ttctgcccag ggcagcagcc tgagctttgc agctgtggac
421  cggctgcagg actctggcac cttccagtgt gtggctcggg atgatgtcac tggagaagaa
481  gcccgcagtg ccaacgcctc cttcaacatc aaatggattg aggcaggctc tgtggtcctg
541  aagcatccag cctcggaagc tgagatccag ccacagaccc aggtcacact tcgttgccac
601  attgatgggc accctcggcc cactaccaa tggttccgag atgggacccc cttttctgat
661  ggtcagagca accacacagt cagcagcaag gagcggaacc tgacgctccg gccagctggt
721  cctgagcata gtgggctgta ttctgctgc gccacagtg cttttggcca ggcttgacgc
781  agccagaact tcaccttgag cattgctgat gaaagctttg ccagggtggt gctggcacc
841  caggacgtgg tagtagcgag gtatgaggag gccatgttcc attgccagtt ctacgcccag
901  ccacccccga gcctgcagtg gctctttgag gatgagactc ccatcactaa ccgcagtcgc
961  ccccccacacc tccgcagagc cacagtgttt gccaacgggt ctctgctgct gaccaggtc
1021  cggccacgca atgcagggat ctaccgctgc attggccagg ggcagagggg cccaccatc
1081  atcctggaag ccacacttca cctagcagag attgaagaca tgccgctatt tgagccacgg
1141  gtgtttacag ctggcagcga ggagcgtgtg acctgccttc ccccaagggt tctgccagag
1201  cccagcgtgt ggtgggagca cgcgggagtc cggctgcca cccatggcag ggtctaccag
1261  aagggccacg agctggtgtt ggccaatatt gctgaaagtg atgctggtgt ctacacctgc
1321  cacgcggcca acctggctgg tcagcggaga caggatgtca acatcactgt ggccactgtg
1381  ccctcctggc tgaagaagcc ccaagacagc cagctggagg agggcaaacc cggctacttg
1441  gattgcctga cccaggccac accaaaacct acagtgtgtt ggtacagaaa ccagatgctc
1501  atctcagagg actcacggtt cgaggtcttc aagaatggga ccttgcgcat caacagcgtg
1561  gaggtgtatg atgggacatg gtaccgttgt atgagcagca cccagccgg cagcatcgag
1621  gcgcaagccc gtgtccaagt gctggaaaag ctcaagttca caccaccacc ccagccacag
1681  cagtgcagtg agtttgacaa ggaggccacg gtgccctgtt cagccacagg ccgagagaag
1741  cccactatta agtgggaacg ggcagatggg agcagcctcc cagagtgggt gacagacaac
1801  gctgggaccc tgcattttgc ccgggtgact cgagatgacg ctggcaacta cacttgcatt
1861  gcctccaacg ggccgcaggg ccagattcgt gcccatgtcc agctcactgt ggcagttttt
1921  atcaccttca aagtggaacc agagcgtacg actgtgtacc agggccacac agccctactg
1981  cagtgcagtg cccaggggga cccaagccg ctgattcagt ggaaaggcaa ggaccgcac
2041  ctggacccca ccaagctggg acccaggatg cacatcttcc agaattggct cctggtgatc
2101  catgacgtgg cccctgagga ctcaggccgc tacacctgca ttgcaggcaa cagctgcaac
2161  atcaagcaca cggaggcccc cctctatgtc gtggacaagc ctgtgccgga ggagtcggag
2221  ggccctggca gccctcccc ctacaagatg atccagacca ttgggttgct ggtgggtgcc
2281  gctgtggcct acatcattgc cgtgtgtggc ctcatgttct actgcaagaa gcgctgcaaa
2341  gccaaagcgc tgcagaagca gcccgagggc gaggagccag agatggaatg cctcaacggt
2401  gggcctttgc agaacgggca gccctcagca gagatccaag aagaagtggc cttgaccagc

```

Contd...

2461 ttggggtccg gccccgccc caccaacaaa cgccacagca caagtgataa gatgcacttc  
2521 ccacgggtcta gcctgcagcc catcaccacg ctggggaaga gtgagtttgg ggaggtgttc  
2581 ctggcaaagg ctcagggcct ggaggaggga gtggcagaga ccctgggtact tgtgaagagc  
2641 ctgcagagca aggatgagca gcagcagctg gacttccgga gggagttgga gatgtttggg  
2701 aagctgaacc acgccaacgt ggtgcggctc ctggggctgt gccgggaggc tgagccccac  
2761 tacatggtgc tggaatatgt ggatctggga gacctcaagc agttcctgag gattttcaag  
2821 agcaaggatg aaaaattgaa gtcacagccc ctcagcacca agcagaagggt ggccctatgc  
2881 acccaggtag ccctgggcat ggagcacctg tccaacaacc gctttgtgca taaggacttg  
2941 gctgcgcgta actgcctggt cagtgcctcag agacaagtga aggtgtctgc cctgggcctc  
3001 agcaaggatg tgtacaacag tgagtactac cacttccgcc aggcctgggt gccgtgcgc  
3061 tggatgtccc ccgaggccat cctggagggt gacttctcta ccaagtctga tgtctgggcc  
3121 ttcggtgtgc tgatgtggga agtgtttaca catggagaga tgcccatgg tgggcaggca  
3181 gatgatgaag tactggcaga tttgcaggct gggaaggcta gacttcctca gcccgagggc  
3241 tgcccttcca aactctatcg gctgatgcag cgctgctggg ccctcagccc caaggaccgg  
3301 ccctccttca gtgagattgc cagcgccctg ggagacagca ccgtggacag caagccgtga  
3361 ggagggagcc cgctcaggat ggccctggga ggggaggaca tctctagagg gaagctcaca  
3421 gcatgatggg caagatccct gtcctcctgg gccctgaggc ccctgcccta gtgcaacagg  
3481 cattgctgag gtctgagcag ggccctggcct ttcctcctct tcctcaccct catcctttgg  
3541 gaggtgact tggacccaaa ctgggcgact agggctttga gctgggcagt tccccctgcc  
3601 acctcttctc ctatcagggg cagtgtgggt gccacaggta accccaattt ctggccttca  
3661 acttctcccc ttgaccgggt ccaactctgc cactcatctg ccaactttgc ctggggaggg  
3721 ctaggcttgg gatgagctgg gtttgtgggg agttccttaa tattctcaag ttctgggcac  
3781 acaggggttaa tgagtctctt cgcccactgg tcccacttgg ggtctagac caggattata  
3841 gaggacacag caagtgagtc ctccccactc tgggcttgtg cacactgacc cagaccacg  
3901 tcttccccac ccttctctcc tttcctcctc ctaagtgcct ggcagatgaa ggagttttca  
3961 ggagcttttg aactatata aaccgccctt tttgtatgca ccacgggcgg cttttatatg  
4021 taattgcagc gtgggggtgg tgggcatggg aggtaggggt gggccctgga gatgaggagg  
4081 gtgggccatc cttacccac acttttattg ttgtcgtttt ttgtttgttt tgtttttttg  
4141 tttttgtttt tgtttttaca ctcgtgctc tcaataaata agcctttttt a

Figure 3

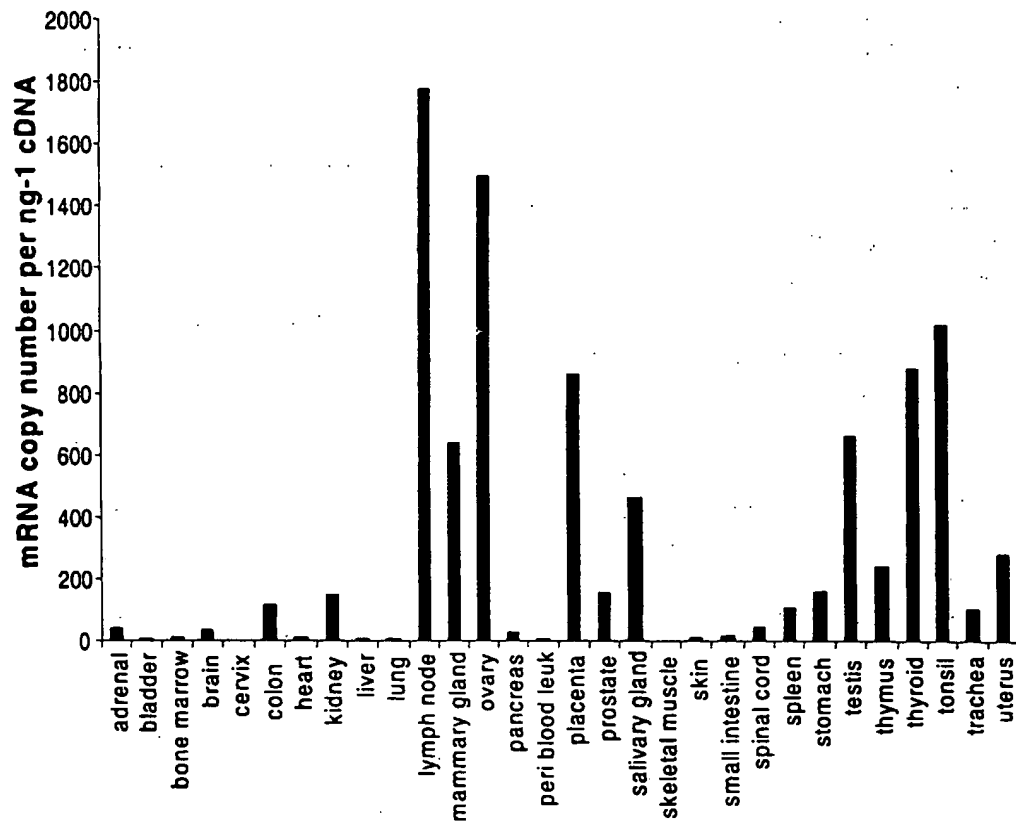


Figure 4

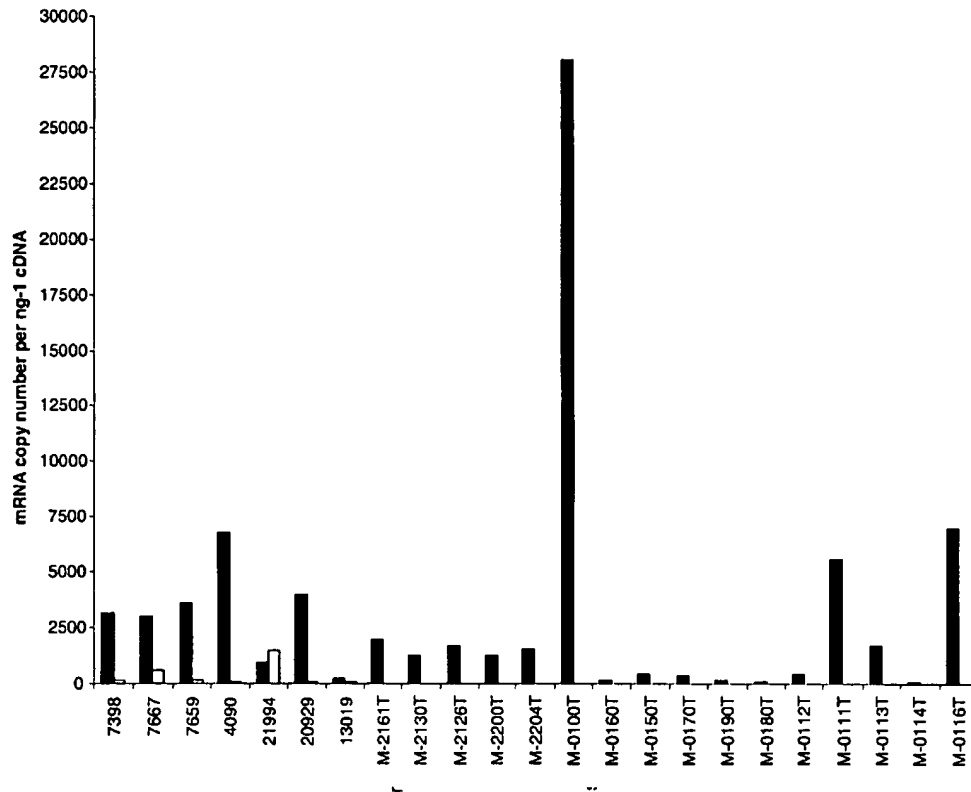


Figure 5

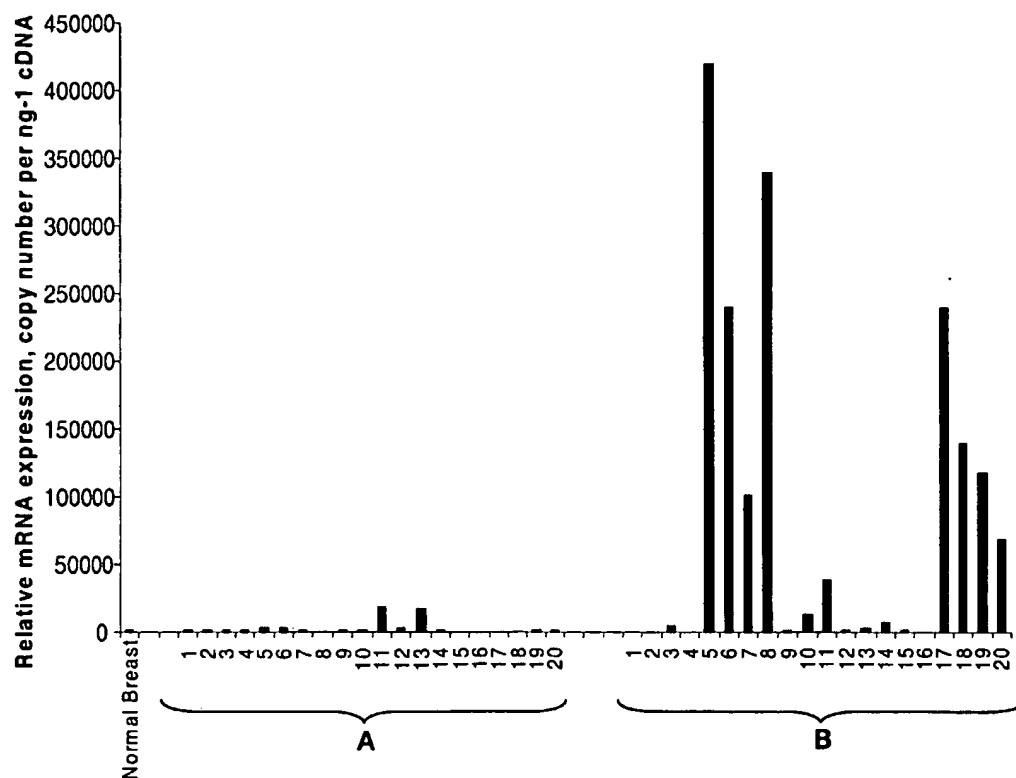


Figure 6

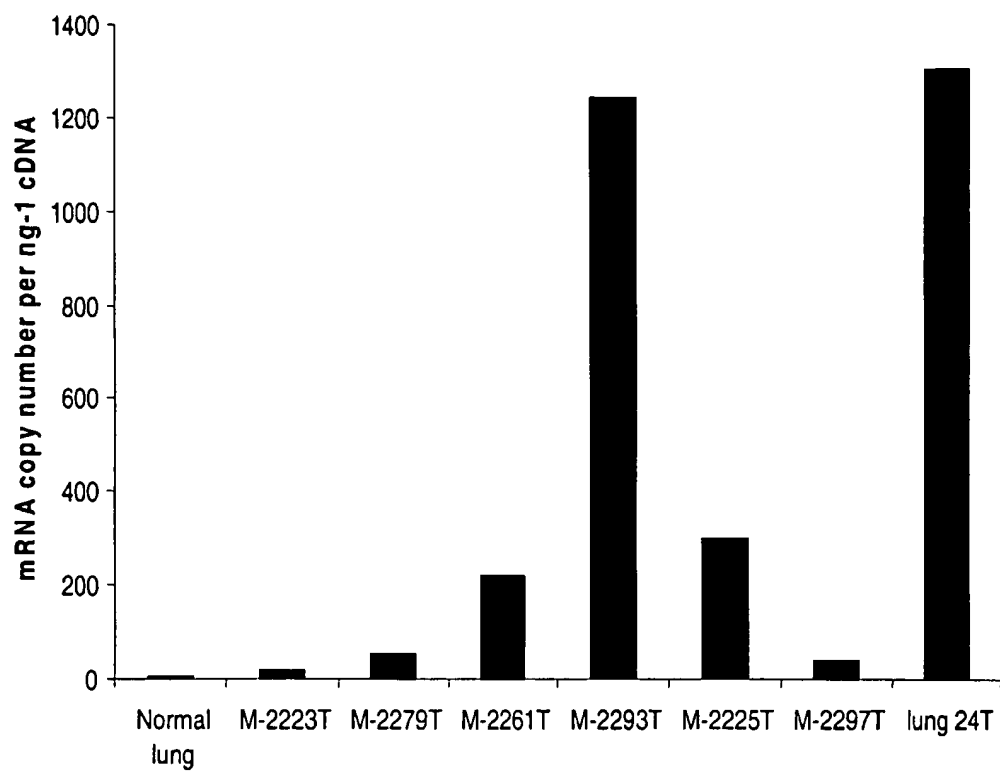


Figure 7

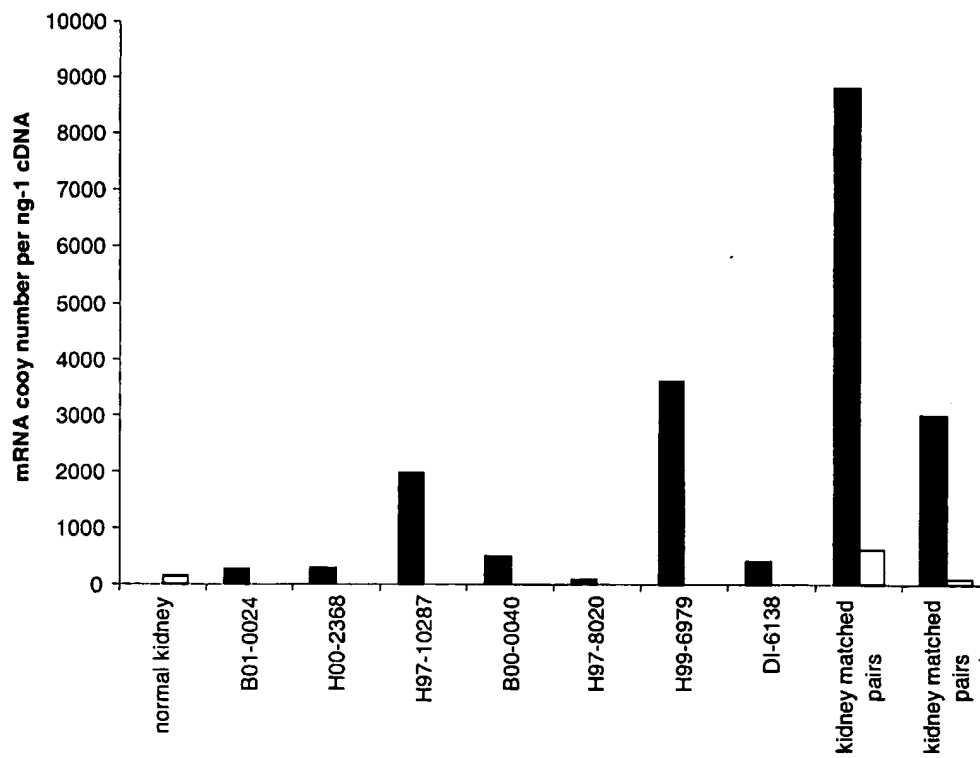
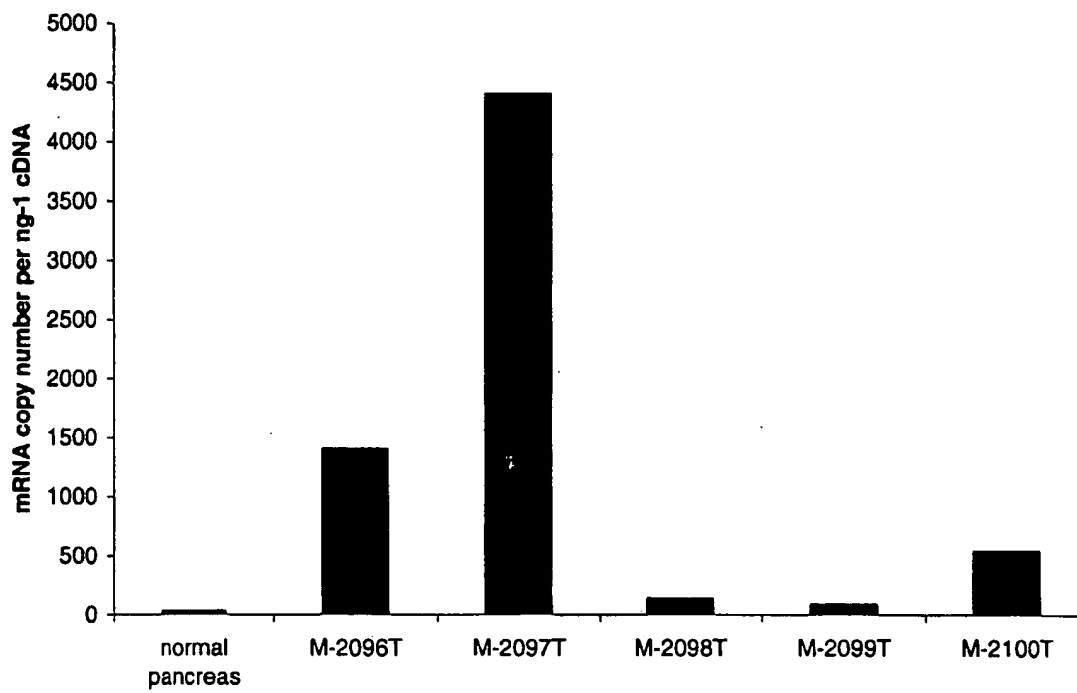
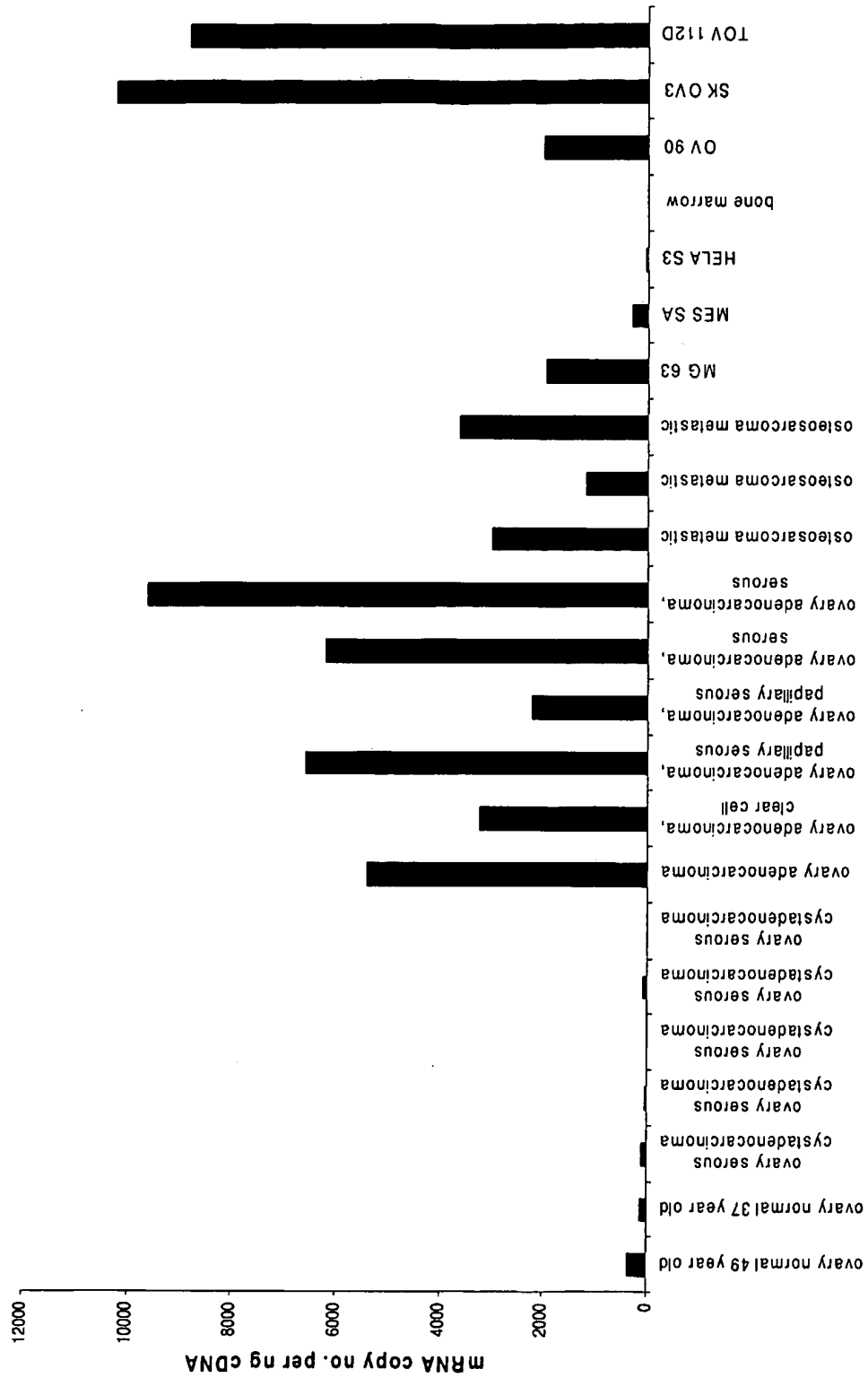




Figure 8



### Figure 9



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☒ **FADED TEXT OR DRAWING**

☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**